

SPECIFICATION AMENDMENTS:**RECEIVED
CENTRAL FAX CENTER****OCT 31 2007**

Please amend the specification as indicated:

Please replace paragraph [0006] with the following amended paragraph:

[0006] The disclosed system provides a VoiceXML based software-driven switchboard powered by multiple rule engines that routes calls from one source to another. Referring to FIG. 1, a system for handling calls is shown. The system includes a voice converted data module (e.g. VoiceXML root engine 100), an IVR dialog engine 120, and a routing engine 130. The VoiceXML root engine 100, the IVR dialog engine 120, and the routing engine 130 are all coupled to an application server 170. The application server 170 is coupled to a database 116 to store business rules and logic. The VoiceXML root engine 100 is coupled to a second database 114 which includes DNIS rule tables. The VoiceXML root engine 100 is coupled to the application server 170 via connection 112 and is coupled to the DNIS rule table 114 via a connection 110. The VoiceXML root engine 100 is coupled to the IVR dialog engine 120 via connection 113. The VoiceXML root engine 100 has an input responsive to various incoming IVR applications 106 (IVR1, IVR2 to IVRn), and internet-based telephony systems and time division multiplexing (TDM) telephony systems such as the session internet protocol (SIP)/TDM phone 190 102, and wireless telephony systems, such as a wireless communication device 192. The IVR dialog engine 120 is coupled to a computer telephony interface (CTI) 140 via connection 121. The computer telephony interface (CTI) 140 is coupled to a customer relationship management (CRM) database 142 via connection 141. Connection 141 may carry a telephone number request and may retrieve customer information related to that telephone number from the CRM 142.

Please replace paragraph [0021] with the following amended paragraph:

[0021] FIG. 2 illustrates detailed processing logic being executed after a call arrives at the switchboard but before the first prompt is played by the IVR dialog engine 120. For calls coming from a SIP (Session Initiation Protocol) endpoint 202, Root Engine 100 has a built-in firewall to automatically accept or reject a corresponding http request based on their originating

host IP address. If the access is granted, an http request [[Q]] will wake up SIP listener process 212 which will then take a proper action. If calls come from a TDM telephone network, it will trigger one of telephony media processors 211 on the switchboard. Process 211 can be pre-programmed to reject certain unknown DNIS, such as by not answering the call at all. In addition to DNIS, the TDM network may also deliver ANI which may or may not correspond to the TN for the calling customer. For SIP calls, the TN is normally delivered as an argument attached to an http request.

Please replace paragraph [0024] with the following amended paragraph:

[0024] If the DNIS is not on the excluded list, process 211 will search Database 114 to determine if there are any special rules associated with this DNIS. Decision 221 may consult Database 116 to determine which CGU dialog should be loaded based on the DNIS/URL and TN. Once a match is found from Database 116, this root document may instruct the switchboard to activate a software constructor 234. Constructor 234 may run on a standard J2EE Application Server. The input link 224 to constructor 234 contains business rules and processing logic defined for a group of DNIS/URL (e.g., all the DNIS associated with a single billing number for that enterprise's customers) and TN if available (from either the caller's ANI or passed from an incoming IVR application (e.g., IVR2 as shown in the drawing)). Based on a set of pre-defined CGU dialog templates, constructor 234 builds in real-time a set of dynamic VoiceXML pages and store stores the first page at a pre-defined location according to document 215. After that, Root Engine 100 returns control to the switchboard. After the return, the VoiceXML interpreter continues to process the first VoiceXML form (id="CGU") specified in the starting document. The tag <submit> inside the VoiceXML form CGU will cause the switchboard to activate IVR Dialog Engine 120 by fetching the page just generated.

Please replace paragraph [0028] with the following amended paragraph:

[0028] Process 420 employs a selected CGU dialog (most often a highly focused CGU dialog designed specifically for a certain profile such as consumer-billing or business-payment etc) to gather further information about the caller's goal (why they are calling and so on). If the CGU dialog is able to ~~reecognized~~ recognize their goal, process 420 sends a confidence score of that

recognition to process 421 which controls the decision threshold. The decision threshold may be periodically changed based on an offline tuning database 424. For example, when the switchboard is initially installed, database 424 may only contain the tuning data collected from a few thousands of calls. At that initial stage, process 421 may choose to use a very tight threshold to determine if the confidence score from a CGU dialog is high enough to be acceptable or not. As the size of Database 424 grows over time, the decision threshold may be automatically adjusted to achieve the balance desired (between misunderstanding a customer's goal and rejecting the assessed CGU).